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ACCIDENTAL HYPOTHERMIA

A Winter Hazard

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Cold weather can be risky for anyone, but especially for older people. Almost everyone is familiar with winter hazards such as broken bones from falls on ice or breathing difficulties triggered by cold air. But the winter chill can also lead to a temperature drop inside the body that can be deadly if not found quickly and treated properly. This lowered body temperature, usually brought on by staying in a cool or cold place for a long time, is called hypothermia (hi-po-ther-mee-uh). It is a special problem for older people, who often have other illnesses or take medications that can interfere with the body's ability to regulate its temperature.

What is hypothermia?

Hypothermia is marked by unusually low body temperatures, below 96°F (35.5°C)—well below the body's normal temperature of 98.6°F (37°C). What may seem like a mere couple of degrees can have a devastating effect. Severe hypothermia can cause an irregular heartbeat leading to heart failure and death.

Body temperature is a balance between how much heat is produced and how much is lost. The brain acts as a thermostat sending and receiving signals to and from parts of the body that affect temperature, which include the spinal cord, muscles, blood vessels, endocrine system and skin. The body has many different reactions to cold. Shivering by the muscles, for instance, is one way the body produces heat. Muscles shiver in response to messages sent by the nerves; shivering increases muscle cell activity, which in turn produces heat.

What to look for

How can you tell if someone has hypothermia?

Older people may be reluctant to complain, or are unaware of how serious the cold can be. Look for these signs of hypothermia:

- ✔ Confusion or sleepiness.
- ✔ Slowed, slurred speech or shallow breathing.
- ✔ Weak pulse; low blood pressure.
- ✔ A change in behavior during cold weather or a change in the way a person looks.
- ✔ Excess shivering or no shivering; stiffness in the arms or legs.
- ✔ Chilly rooms or other signs that the person has been in a cold place.
- ✔ Poor control over body movements or slow reactions.

If a person says he or she is unusually cold, check his/her temperature with a thermometer. First, shake the thermometer to below its lowest point. Then, if the temperature appears to be below 96°F (35.5°C) or it can't be read on an oral thermometer, take the person's temperature rectally to get a more exact core body reading. If the thermometer still does not show the temperature or is below 96°F, call for emergency help. The only way to tell accurately if a person has hypothermia is to use a special thermometer that can read temperatures below 94°F (34°C). Most hospitals have these thermometers.

Treatment and recovery from hypothermia

The most important step in treating hypothermia is to make the person warm and dry. He or she must be seen by a doctor, preferably one who knows about the condition and who is located in a well-equipped hospital emergency room. There, the doctors will warm the body from inside out. For example, they may give the person warm fluids intravenously (I.V.).

If you suspect that a person has hypothermia and emergency help is not available right away, move the person to a warmer location, if possible, and wrap him or her in a warm blanket to stop further heat loss. You can also use your own body heat to keep the person warm. Lie close to the victim, but be gentle and do not handle the person roughly. Rubbing the person's arms and legs, as many rescuers are tempted to do, can make the problem worse.

Chances for recovery depend on how long a person was exposed to the cold and his or her general health. If body temperature has not dropped below 90°F (32.2°C), chances for a total recovery are usually good. If body temperature has fallen to between 80°F (26.6°C) and 90°F (32.2°C), most people will recover, but some lasting damage is likely. If the temperature goes under 80°F (26.6°C), most victims will not survive.

Some safety tips!

Guarding against hypothermia

Living conditions, illnesses and some medicines (those affecting the body's ability to respond to cold) increase the risk for hypothermia.

Environment

People who live in poorly heated homes risk getting accidental hypothermia when the weather is cold. Even mildly cool temperatures of 60°F (15.5°C) to 65°F (18.3°C) inside can trigger the condition. Homes can have inadequate insulation, or people with low incomes and little savings may keep temperatures in the dangerous range as they try to keep heating bills down.

Some help is available. To improve insulation, some states fund programs to help low income families "weatherize" their homes. You can contact your state or local energy agency or the local power or gas company for more information. Weatherizing your home, or heating only one or two of the in-use rooms of a house, will keep heating bills down.

In addition, some low-income families may qualify for help in paying their heating bills. State and local energy agencies, or gas and electric companies, have special programs. You can contact them for details. Also, if a person cannot pay a utility bill, many states and cities now have laws that stop landlords from cutting off gas or electricity in cold weather, at least until other plans are made. Do not wait for winter to find out about these programs.

Check with your local government about the laws that may apply, then pass this information along to a relative or an older person's legal representative.

Older people may be vulnerable to hypothermia even when they live in nursing homes or group facilities. These institutions have to be careful when lowering temperature, because patients who are already sick may have special difficulty keeping warm.

Being knowledgeable about the weather can help reduce risks too. For example, brisk winds cause more rapid heat loss than calmer weather. Weather forecasters call this the wind-chill factor. They often suggest, even when the temperature itself is not very low, that the wind-chill factor is low enough for people to stay indoors.

Health

Some illnesses and medications place a person at risk because they affect the way the body handles cold temperatures. Illnesses that may blunt the response to cold include:

- Slow thyroid (hypothyroidism) or other disorders of the body's hormone system.
- Stroke or other disorders that cause paralysis or reduce awareness.
- Severe arthritis, Parkinson’s disease or other illnesses that limit activity.
- Any condition that curbs the normal flow of blood.
- Memory disorders.

Certain medicines also increase the risk of accidental hypothermia. They include drugs used to treat anxiety, depression or nausea, and some over-the-counter cold remedies. Ask your doctor how your medicines affect body heat. In addition to some medication, alcoholic drinks lower the body's ability to retain heat.

Stopping accidental hypothermia

Increased awareness is the most effective way to prevent and treat accidental hypothermia. Older people, their families and friends should keep alert for hypothermia risks and try to reduce them. Keep older people warm and dry during cool weather. Doctors, nurses and health professionals—including those working in emergency rooms—must remember to check for hypothermia.

Remember these important facts:

- Accidental hypothermia is a drop in body temperature to below 96°F (35.5°C).
- Hypothermia affects older people more often than younger people.
- Older people are at risk of hypothermia not only in cold weather, but in mildly cool temperatures as well.
- Alcoholic drinks, certain illnesses and some medications can affect the body's ability to regulate temperature.
- A person suffering from hypothermia is often confused, sleepy or can have slurred speech.
- Hypothermia is dangerous and requires immediate medical care.